Oregon Status Factors

Elcode NLLEC1C050

Gname NEPHROMA OCCULTUM

Gcomname

Number of Occurrences

D = 81 - 300

Comments 83 populations in Oregon.

Number of Occurrences with Good Viability

D = Some (13-40) occurrences with good viability

E = Many (41-125) occurrences with good viability

Comments

Population Size

C = 250-1,000 individuals

Comments

Range Extent

E = 5,000-20,000 km2 (about 2,000-8,000 square miles)

Comments Occurs west of the Cascades. Range is approximately 6,000 square miles in Oregon.

Area of Occupancy

G = 2,000-20,000 km2 (500,000-5,000,000 acres)

LG = 20,000-200,000 km (about 12,500-125,000 miles)

Comments

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

U = Unknown. Long-term trend in population, range, area occupied, or number or condition of occurrences unknown

Comments Described in 1980; entire range still unknown.

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

D = Declining. Decline of 10-30% in population, range, area occupied, and/or number or condition of occurrences

E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within ±10% fluctuation

Comments Presumably declining as old-growth areas and other old forests decline.

Threats

G = Slightly threatened. Threats, while recognizable, are of low severity, or affecting only a small portion of the population, occurrences, or area. Ecological community occurrences may be altered in minor parts of range or degree of alteration falls within the natural variation of the type.

Scope Low Severity Low Immediacy Moderate

Comments

Logging of old-growth forests is a very major threat (Goward 1994). Management should focus on populations and habitat needs rather than on individuals. Calculations in a study area in southwestern Oregon show that cutting with retention of individual trees surrounded by small buffers could result in the eventual loss of N. occultum (Rosso et al. 2000).

Number of Appropriately Protected and Managed Occurrences

D = Many (13-40) occurrences appropriately protected and managed

Comments OR protected = 21.

Intrinsic Vulnerability

U = Unknown

Comments

Occurs mainly in old-growth trees, which are in the highest demand. Does not succeed on edges. Reproductive capacity and speed unknown.

Environmental Specificity

A = Very Narrow. Specialist or community with key requirements scarce.

B = Narrow. Specialist or community with key requirements common.

Comments

Although the requirement appears to be stable, fairly old forest, apparently appropriate microenvironments occur only in a subset of these forests in the Pacific Northwest.

Other Considerations

ORNHIC - List 4.

Edition 2/20/2003 Edauthor Daphne Stone

Grank S3 Grank Date 11/30/2002

Greasons

Known from 83 populations in Oregon. The species' range is centered in Oregon; it occurs sparsely outside of the state. Riparian zones are not adequate protection for this species: it does not survive on edges.

BCD Sources

New Sources

McCune, B. and L. Geiser. 1997. Macrolichens of the Pacific Northwest. Oregon State University Press, Corvallis, Oregon. A co-publication with the U.S. Department of Agriculture Forest Service. 386 pp. Goward, T. 1994. Status report on the cryptic paw lichen, NEPHROMA OCCULTUM. Committee on the status of endangered wildlife in Canada, Ottawa. 32 pp. Rosso A, McCune B, Rambo T, 2000. Ecology and conservation of a rare, old-growth-associated canopy lichen in a silvicultural landscape. Bryologist 103(1): 117-127.

Wetmore, CM. 1980. Nephroma occultum, new species from North America. Bryologist 83(2): 243-247.